

**PHOTOVOLTAIC (PV) SYSTEM FOR DOMESTIC ELECTRICITY IN
MALAYSIA**

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ABSTRACT

PHOTOVOLTAIC (PV) SYSTEM FOR DOMESTIC ELECTRICITY IN MALAYSIA

The increase of human population was directly impact on the world's energy demand. More people were continuous to find out the alternatives to fulfill the human's needs on the energy. In addition, more negative effects to the environment were generated from the non-renewable energy resources such as petroleum, natural gases, and coal. These types of energy resources affect significantly the sustainability of human's health, environment, flora and fauna. Besides that, most of the energy consumed came from the non-renewable energy resources were depleted vigorously. Leading to the exploration of renewable energy resources, Malaysia covers 329, 961.22 km² area received solar radiation about 6 hours a day. These conditions have brought the idea to use the energy from the solar energy sources which is called a photovoltaic system for domestic electricity in Malaysia. Hence, this study is done to discover the relevancy and potential implementation of photovoltaic system as the electrical energy in Malaysia in terms of social, economic, politic, technology and environment. The cost of energy (COE) in kilowatt per hour (kW/h) was considered and compared to the cost of energy of conventional resource as the indicator of its reliability and solution to the Malaysia's energy demand especially for domestic electricity.